proportional Hazards models, including the following candidate covariables: age, sex, diabetes, hypertension, hypercholesterolemia, current smoking, prior PCI, prior CABG, previous MI, baseline creatinin clearance, baseline Hb, heart rate and systolic blood pressure, peak CK-MB release and multivessel disease.
Results: Of 1602 patients with STEMI, 147 patients (9.3 %) developed a Hb decrease > 4 g/dL. Of these, no bleeding focus could be established in 54 patients (3.4 %). Patients with a Hb decrease ≥ 4 g/dL had a HR 1.61 (95 % CI 0.84 – 3.09, p 0.15) for one year mortality if blood loss was observed, and a HR 3.18 (95% CI 1.49 – 6.76, p = 0.003) if no blood loss was observed.
Conclusion: A periprocedural hemoglobin decrease irrespective of observed bleeding represents a strong independent predictor for one year mortality. Compared with patients who suffered observed blood loss, patients without observed blood loss had a higher risk for one year mortality.

TCT-342

Accuracy of Acef, Euroscore and Syntax Score in Risk Stratification of Elderly (≥70years) Patients Undergoing Primary Angioplasty

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Background: With increasing life expectancy the management of acute myocardial infarction (AMI) in patients of an older age is of growing importance. However, data are limited regarding risk stratification of ST-segment elevation myocardial infarction (STEMI) in elderly people (≥70years). We thus performed a retrospective study to compare the accuracy of three risk scores - ACEF, EuroSCORE and SYNTAX Score - in subjects <70 and ≥70 years with STEMI.
Methods: We included 100 patients undergoing primay PCI at our centre from July 2002 to December 2005.We compared the accuracy in predicting MACE of the three scores both in patients ≥70years and <70years using ROC curves and matching Areas Under Curves (AUC).
Results: We included a total of 100 patients, 36 ≥70years and 64 <70years. The percentages of male subjects (72.22% vs 93.75%, p=0.0029) and previous AMI (0% vs 11.11%, p=0.0097) were higher in the <70 group, while in-stent restenosis (5.55% vs 0%, p=0.0267) was more frequent in older patients. In patients ≥70years the best predictor for MACE is SYNTAX Score (AUC 0.628, 95%CI 0.452- 0.783), followed by ACEF (AUC 0.560, 95%CI 0.385-0.725) and EuroSCORE (AUC 0.536, 95%CI 0.362-0.703), but they do not differ significantly (ACEF vs EuroSCORE p=0.784, ACEF vs SYNTAX Score p=0.616, EuroSCORE vs SYNTAX Score p=0.428). In patients <70years better accuracy is shown by SYNTAX Score (AUC 0.613, 95%CI 0.483-0.732), than EuroSCORE (AUC 0.591, 95%CI 0.461-0.713) and ACEF (AUC 0.560, 95%CI 0.430-0.683), without a statistically significant difference (ACEF vs EuroSCORE p=0.567, ACEF vs SYNTAX Score p=0.541, EuroSCORE vs SYNTAX Score p=0.800).
Conclusion: All the assessed scores (ACEF, EuroSCORE and SYNTAX Score) have a good accuracy in risk stratification of patients with STEMI undergoing primary PCI. The greatest results in predicting MACE in both groups (≥70years and <70years) are shown by SYNTAX Score; consequently SYNTAX Score might be proposed as a scoring system to be used in both youger and older patients in the emergency setting.

TCT-343

In-Hospital Mortality of Patients Undergoing Primary Percutaneous Coronary Intervention: Validation of the EuroHeart STEMI PCI Score

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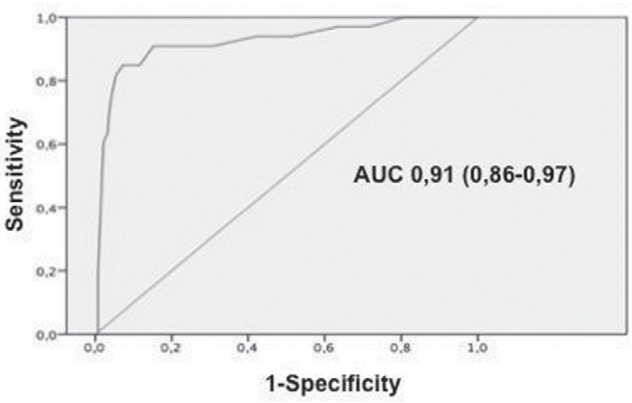
Background: A new scoring system, the EuroHeart score (EHs), was developed recently in patients included in the PCI registry of the Euro Heart Survey. We assessed the validity of this risk score in a contemporary cohort of patients admitted to our hospital with ST elevation myocardial infarction (STEMI) who were undergoing primary percutaneous coronary intervention (PPCI).
Methods: The study included 310 consecutive patients undergoing PPCI between January 2009 and December 2010.The validity of the EHs was evaluated by assessing its calibration using the Hosmer-Lemeshow test and its discriminatory capacity was evaluated using the area under the ROC curve.
Results: The median patient age was 66 years, 73% were men and 26.5% had diabetes. Percutaneous access was via the radial approach in 72% of the patients. The culprit artery was the left anterior descending in 42.7% of the patients,31% had three-vessel disease and a stent was implanted in 90% of the patients. The median EHs STEMI PCI was 16[11–21]. We divided the patients into tertiles: EHs(1)≤14; EHs(2) >14 and ≤18; EHs(3) >18. In-hospital mortality was 10.6%: 1% in EHs (1), 2% in EHs (2), and 3.7% in EHs (3) (P<0.05). The EHs levels were an independent determinant of in-hospital mortality in a multivariate analysis (HR IC95%: 1.164 (1.115–1.214), P<0.05). The calibration of the EHs STEMI PCI was good (Hosmer-Lemeshow, P>0.5), and its discriminatory capacity was excellent, with an area under the ROC curve of 0.91 (0.86–0.97)



Conclusion: The EHs STEMI PCI for predicting in-hospital mortality was validated in our cohort of patients. The EHs is easy to implement in clinical practice and is very useful for the stratification of this group of patients.

TCT-344

Post-discharge Bleeding and Thienopyridine Discontinuation among AMI Patients Treated with PCI: Insights from the TRANSLATE-ACS Study

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Background: Patients with AMI treated with PCI require long-term thienopyridine therapy, yet the incidence of post-discharge bleeding and its association with thienopyridine discontinuation in real-world practice is unknown.
Methods: TRANSLATE-ACS is an ongoing registry of AMI patients treated with PCI and thienopyridine therapy. We examined the incidence of patient-reported "severe, unexplained bruising or bleeding" by 6 weeks post-discharge, and bleeding-associated thienopyridine cessation and rehospitalization (verified by billed diagnosis codes).
Results: Among 2177 AMI patients (53% STEMI) treated with PCI and discharged on a thienopyridine, 322 (15%) reported any bleeding within 6 weeks post-discharge. Patients enrolled to date who reported bleeding were younger (median 58 vs. 60 years, p=0.04) and more likely to be female (40 vs. 26%, p<0.0001) than those without bleeding. Between groups, there were no differences in MI type (STEMI vs. NSTEMI) and in-hospital bleeding rates. Nuisance bleeding, such as severe bruising and nose bleeds, were the most frequent bleeding complaints (Table). However, by 6 weeks post-discharge, only 12 (3.7%) of 322 patients reporting bleeding required hospitalization for bleeding and only 1 of these hospitalized patients stopped thienopyridine therapy (due to thrombocytopenia). Among non-rehospitalized patients who reported bleeding, 4 patients (1.2%) had stopped thienopyridine therapy due to bleeding by 6 weeks.

Table. Frequency of bleeding in each location and associated intervention

Bleeding location	Frequency	Brought to MD attention*	Required medical intervention/ hospitalization*
Bruising	220 (68 %)	106 (48%)	10 (5%)
Nosebleed	51 (16 %)	26 (51%)	11 (22%)
Gastrointestinal	23 (7 %)	14 (61%)	7 (30%)
Hematuria	11 (3 %)	7 (64%)	5 (46%)
Incisional	9 (3 %)	9 (100%)	3 (33%)
Hemoptysis	5 (2 %)	4 (80%)	3 (60%)
Vaginal	3 (1 %)	3 (100%)	0 (0%)
Intracranial	2 (0.6%)	2 (100%)	2 (100%)
Other	45 (14 %)	23 (51%)	10 (22%)

*among patients who reported bleeding in each specified location

Conclusion: While nuisance bleeding or bruising is a frequent complaint during the early post-discharge time period among PCI-treated AMI patients, bleeding is only rarely associated with antiplatelet therapy discontinuation or rehospitalization.

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